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**TETRADECACHLOROCYCLOHEXASILANE-
DIANION-CONTAINING COMPOUND**

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a compd. for vapor deposition of an amorphous silicon film by bringing a metallic hydride reducing agent into contact with a tetradecachlorocyclohexasilane.dianion-contg. compd. obtnd. by bringing a reagent compsn. comprising a tert. polyamine into contact with trichlorosilane.

SOLUTION: Trichlorosilane is reacted with a reagent compsn. comprising a tert. polyamine such as N,N,N',N'',N'''-pentaethylenetriamine(pedeta) in a molar ratio of (0.1:1) to (10:1) in a solvent such as dichloromethane, crystallization is carried out at \leq room temp. and a solvent such as pentane is added to deposit a tetradecachlorocyclohexasilane.dianion-contg. compd. represented by the formula [pedeta.SiH₂Cl-1]2[Si₆Cl₁₄-2]. This compd. is reacted with a metallic hydride reducing agent such as AlH₄ in an org. solvent at -110 to +150°C to obtain cyclohexasilane. It is reacted with a Grignard reagent to obtain dodecaorganocyclohexasilane.

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